

IN THE CLAIMS

Please amend the claims as indicated below.

1. (previously presented) A contoured structural member, comprising:
an inner section containing a plurality of layers comprising a composite material or a metal-containing material;
an outer section containing a plurality of layers comprising a composite material or a metal-containing material;
at least one intermediate layer having a ribbed structure connecting the inner and the outer sections; and
a coating.
2. (original) The structural member of claim 1, wherein the structural member has a closed configuration.
3. (previously presented) The structural member of claim 1, wherein the inner section contains both a composite material and a metal-containing material.
4. (previously presented) The structural member of claim 1, wherein the outer section contains both a composite material and a metal-containing material.
5. (previously presented) The structural member of claim 1, wherein the coating is located on the outer surface of the structural member, the inner surface of the structural member, or both.
6. (previously presented) The structural member of claim 1, wherein the coating is located between the inner section and the at least one intermediate layer, between the outer section and the at least one intermediate layer, or both.
7. (previously presented) The structural member of claim 1, wherein the coating is incorporated within the inner section, within the at least one intermediate layer, within the outer section, or any combination thereof.
8. (previously presented) The structural member of claim 1, wherein the coating modifies the friction, magnetic, chemical properties, or conductivity properties of the inner section, the at least one intermediate layer, the outer section, or any combination thereof.

9. (previously presented) The structural member of claim 1, wherein the coating comprises polytetrafluoroethylene.

10. (original) The structural member of claim 1, wherein the ribbed structure of the at least one intermediate layer comprises a honeycomb structure.

11. (original) The structural member of claim 1, further comprising at least one initiator.

12. (original) The structural member of claim 1, wherein the composite material is a reinforced resin matrix material.

13. (original) The structural member of claim 12, wherein reinforced resin matrix material comprises at least one prepreg ply.

14. (previously amended) The structural member of claim 1, wherein both the inner and the outer sections comprise a composite material.

15. (previously presented) The structural member of claim 1, wherein both the inner and the outer sections comprise a metal-containing material.

16. (previously presented) The structural member of claim 1, wherein the inner section comprises a composite material and the outer section comprises a metal-containing material.

17. (previously presented) The structural member of claim 1, wherein the inner section comprises a metal-containing material and the outer section comprises a composite material.

18. (previously presented) A contoured structural member, comprising:

an inner section containing a plurality of layers comprising a composite material or a metal-containing material;

an outer section containing a plurality of layers comprising a composite material or a metal-containing material;

at least one intermediate layer having a honeycomb structure connecting the inner and the outer sections; and

a coating modifying the friction, magnetic, chemical resistance, or conductivity properties of the inner section, the at least one intermediate layer, the outer section, or any combination thereof.

19. (previously presented) A closed, contoured structural member, comprising:

an inner section containing a plurality of layers comprising a composite material or a metal-containing material;

an outer section containing a plurality of layers comprising a composite material or a metal-containing material;

at least one intermediate layer having a honeycomb structure connecting the inner and the outer sections; and

a coating modifying the friction, magnetic, chemical resistance, or conductivity properties of the inner section, the at least one intermediate layer, the outer section, or any combination thereof.

20. (previously presented) A closed, contoured structural member, comprising:

an inner section containing a plurality of layers comprising a composite material or a metal-containing material;

an outer section containing a plurality of layers comprising a composite material or a metal-containing material;

at least one intermediate layer having a honeycomb structure being substantially contiguous with the inner section and the outer section; and

a coating modifying the friction, magnetic, chemical resistance, or conductivity properties of the inner section, the at least one intermediate layer, the outer section, or any combination thereof.

21. (withdrawn) A method for making a contoured structural member, comprising:

providing at least one inner layer comprising a composite material or a metal-containing material;

roll wrapping at least one intermediate layer over the at least one inner layer, the at least one intermediate layer having a ribbed structure;

providing at least one outer layer over the at least one intermediate layer, the at least one outer layer comprising a composite material or a metal-containing material;

providing a coating in or on the at least one inner layer, the at least one intermediate layer, or the at least one outer layer; and

connecting the at least one inner and outer layer to the at least one intermediate layer;.

22. (withdrawn) The method of claim 21, including providing the at least one inner layer by roll wrapping the at least one inner layer over a substrate.

23. (withdrawn) The method of claim 22, including providing the at least one outer layer by roll wrapping the at least one outer layer over the at least one intermediate layer.

24. (withdrawn) The method of claim 23, further including removing the substrate.

25. (withdrawn) The method of claim 24, including partially or completely filling the interior created by removing the substrate.

26. (withdrawn) The method of claim 25, further including constraining the at least one outer layer when connecting the at least one inner and at least one outer layer to the at least one intermediate layer prior to removing the substrate.

27. (withdrawn) The method of claim 26, including constraining the at least one outer layer by roll wrapping at least one layer of a shrink-wrap material over the at least one outer layer.

28. (withdrawn) The method of claim 27, including removing the at least one layer of the shrink-wrap material after the reaction.

29. (withdrawn) The method of claim 27, further including providing at least one pressure distributor over the at least one outer layer.

30. (withdrawn) The method of claim 29, including providing a plurality of layers of shrink-wrap material with the at least one pressure distributor between two of said layers.

31. (withdrawn) A method for making a contoured structural member, comprising:

roll wrapping at least one inner layer comprising a composite material or a metal-containing material over a substrate;

roll wrapping at least one intermediate layer over the at least one inner layer, the at least one intermediate layer having a ribbed structure; and

roll wrapping at least one outer layer covering the at least one intermediate layer, the at least one outer layer comprising a composite material or a metal-containing material;

providing a coating in or on the at least one inner layer, the at least one intermediate layer, or the at least one outer layer;

connecting the at least one inner and outer layer to the at least one intermediate layer; and removing the substrate.

32. (withdrawn) The method of claim 31, including providing the coating in or on the at least one inner layer, the at least one intermediate layer, or the at least one outer layer before said layer is roll wrapped.

33. (withdrawn) The method of claim 31, including providing the coating on the at least one inner layer, the at least one intermediate layer, or the at least one outer layer after said layer is roll wrapped.

34. (withdrawn) A method for making a contoured structural member, comprising:
roll wrapping at least one inner layer comprising a composite material or a metal-containing material over a substrate;
roll wrapping at least one intermediate layer over the at least one inner layer, the at least one intermediate layer having a ribbed structure; and
roll wrapping at least one outer layer covering the at least one intermediate layer, the at least one outer layer comprising a composite material or a metal-containing material;
providing a coating in or on the at least one inner layer, the at least one intermediate layer, or the at least one outer layer;
constraining the outer portion with a shrink-wrap material;
connecting the at least one inner and outer layer to the at least one intermediate layer; and
removing the shrink-wrap material and the substrate.

35. (withdrawn) A method for making a contoured structural member, comprising:
roll wrapping at least one inner layer comprising a composite material or a metal-containing material over a substrate;
roll wrapping at least one intermediate layer having a honeycomb structure to be substantially contiguous with the at least one inner layer; and
roll wrapping at least one outer layer to be substantially contiguous with the at least one intermediate layer, the at least one outer layer comprising a composite material or a metal-containing material;
providing a coating in or on the at least one inner layer, the at least one intermediate layer, or the at least one outer layer;
constraining the outer portion with a shrink-wrap material;
connecting the at least one inner and outer layer to the at least one intermediate layer; and

removing the shrink-wrap material and the substrate.

36. (currently amended) A contoured structural member made by the method comprising:
providing at least one inner layer comprising a composite material or a metal-containing material;

roll wrapping at least one intermediate layer over the at least one inner layer, the at least one intermediate layer having a ~~ribbed~~ honeycomb core structure;

providing at least one outer layer over the at least one intermediate layer, the at least one outer layer comprising a composite material or a metal-containing material;

connecting the at least one inner and outer layer to the at least one intermediate layer;

providing a coating in or on the at least one inner layer, the at least one intermediate layer, or the at least one outer layer.

37. (currently amended) A contoured structural member made by the method comprising:

roll wrapping at least one inner layer comprising a composite material or a metal-containing material over a substrate;

roll wrapping at least one intermediate layer over the at least one inner layer, the at least one intermediate layer having a ~~ribbed~~ honeycomb core structure; and

roll wrapping at least one outer layer covering the at least one intermediate layer, the at least one outer layer comprising a composite material or a metal-containing material;

providing a coating in or on the at least one inner layer, the at least one intermediate layer, or the at least one outer layer;

connecting the at least one inner and outer layer to the at least one intermediate layer; and
removing the substrate.

38. (currently amended) A contoured structural member made by the method comprising:

roll wrapping at least one inner layer comprising a composite material or a metal-containing material over a substrate;

roll wrapping at least one intermediate layer over the at least one inner layer, the at least one intermediate layer having a ~~ribbed~~ honeycomb core structure; and

roll wrapping at least one outer layer covering the at least one intermediate layer, the at least one outer layer comprising a composite material or a metal-containing material;

providing a coating in or on the at least one inner layer, the at least one intermediate layer, or the at least one outer layer;

constraining the outer portion with a shrink-wrap material;

connecting the at least one inner and outer layer to the at least one intermediate layer; and

removing the shrink-wrap material and the substrate.

39. (original) A contoured structural member made by the method comprising:

roll wrapping at least one inner layer comprising a composite material or a metal-containing material over a substrate;

roll wrapping at least one intermediate layer having a honeycomb structure to be substantially contiguous with the at least one inner layer; and

roll wrapping at least one outer layer to be substantially contiguous with the at least one intermediate layer, the at least one outer layer comprising a composite material or a metal-containing material;

providing a coating in or on the at least one inner layer, the at least one intermediate layer, or the at least one outer layer;

constraining the outer portion with a shrink-wrap material;

connecting the at least one inner and outer layer to the at least one intermediate layer; and

removing the shrink-wrap material and the substrate.